

REMARKS

The rejection of Claims 1-31 under 35 U.S.C. § 103(a) as unpatentable over U.S. 6,309,545 (Penth et al), is respectfully traversed.

As described in the specification beginning at page 3, line 5, WO 99/15262, which is the WO equivalent of Penth et al, describes the production of a flexible pervious composite based on a perforate carrier material useful, for example, as a membrane in filtration, but such microfiltration membranes have a fairly low transmembrane flux, the ceramic coatings are brittle and are easily detached from the carrier when adhesion is too low using such membranes. Such membranes are then useless.

The present invention addresses the problems of such prior art membranes by producing a membrane having high transmembrane flux and which is more durable than prior art membranes.

The Examiner acknowledges that Penth et al does not disclose the porosity of their composite materials when used as membranes. Indeed, Penth et al actually prefer using woven fibers made of metal, especially such fibers having a mesh structure (column 4, lines 1-10). Indeed, as described in the specification herein beginning at page 3, line 33, it has been surprisingly determined that membranes comprising nonwoven materials based on polymers are distinctly more durable and flexible than membranes comprising ceramic coatings on glass or nonwovens or on polymer films. Absent the present disclosure as a guide, there would have been no motivation to one of ordinary skill in the art to adjust the porosity of any of the carrier fiber materials of Penth et al. Nor does Penth et al disclose that their metal oxide coating be porous.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The rejection of Claims 21-23 under 35 U.S.C. § 103(a) as unpatentable over Penth et al, and further in view of U.S. 2002/0062737 (Guiver et al), is respectfully traversed.

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Guiver et al has been relied on for a disclosure of adhesion promoters. However, Guiver et al does not remedy the above-discussed deficiencies of Penth et al. Accordingly, it is respectfully requested that this rejection be withdrawn.

The provisional rejections of Claims 1-31 on grounds of obviousness-type double patenting over the following applications and claims therein:

Claims 1-25 of Application No. '0/487,145 [sic, 10/487,245];

Claims 1-36 of Application No. 10/504,144;

Claims 1-25 of Application No. 10/524,143;

Claims 1-25 of Application No. 10/524,669;

Claims 1-24 of Application No. 10/519,097;

Claims 1-23 of Application No. 19/572,274 [sic, 10/575,274];

Claims 1-29 of Application No. 10/575,268;

Claims 1-24 of Application No. 10/575,759; and

Claims 22-42 of Application No. 10/575,734,

are all respectfully traversed.

The Examiner is respectfully requested to hold these provisional rejections in abeyance until the present claims are found to be allowable but for these rejections. If, at that time, the copending applications have not been allowed, then the present application should be allowed, and a non-provisional double patenting rejection made in the other applications, if applicable. See M.P.E.P. 822.01. (Applicants do not concede that any such rejection would be applicable.)

For all the above reasons, it is respectfully requested that the provisional rejections be held in abeyance, if not withdrawn.

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All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

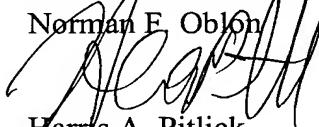
Customer Number

**22850**

Tel: (703) 413-3000  
Fax: (703) 413 -2220  
(OSMMN 06/04)

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.

Norman E. Oblon

  
Harris A. Pitlick  
Registration No. 38,779

NFO:HAP\rle